

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 3-4, 7, 10, 13 and 16 are requested to be cancelled without prejudice or disclaimer.

Claims 1, 8-9 and 11-12 are currently being amended. Support for the amendment to claim 1 can be found at least in original claim 3 and in the specification in paragraph [0031]. No new matter is being added.

This amendment changes and deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1, 2, 5, 6, 8, 9, 11, 12, 14 and 15 are now pending in this application.

Specification

The specification has been amended to provide proper headings and sub-headings for U.S. practice.

Rejections under 35 U.S.C. §§ 102 and 103

Claims 1-10 and 14-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,049,281 to Osterweil ("Osterweil"). Claims 11-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Osterweil in view U.S. Patent No. 7,110,569 to Brodsky et al. ("Brodsky"). Applicant respectfully traverses these rejections for at least the following reasons.

Independent claim 1, as amended, recites:

A condition analysis apparatus comprising:

a three-dimensional sensor for measuring, at a plurality of sampling points, sampling-point-moves in a height direction of an object existing in a target area; and

area definition means for defining an area where a plurality of the sampling-point-moves are in generally a same phase;

said three-dimensional sensor comprising:

a projection device for projecting a light pattern on the target area;

an image capturing apparatus for capturing an image of the target area while the light pattern is projected thereon, said image capturing apparatus being installed distanced from said projection device; and

measurement means for measuring shifts of the pattern on the captured images,

wherein sampling-point-moves in the height direction of the object are measured at the plurality of points based on the shifts of the pattern measured.

Osterweil and Brodsky fail to disclose at least the above italicized features of claim 1.

Osterweil discloses an apparatus for monitoring movements of an individual (title). The system includes an optical system or camera 20 that captures and focuses an image of a hospital bed and its surrounding periphery (col. 7, lines 42-44). The camera is positioned so that a fan-shaped detection zone 15 covers the top of the bed (col. 8, lines 11-12). The system is for monitoring an individual to determine when that individual is likely to exit a supportive structure (abstract), i.e., the bed.

Osterweil, however, fails to disclose any of the above italicized features of claim 1. While Osterweil discloses a camera to capture an image of a monitored zone such as a hospital bed, Osterweil discloses no projection device that projects a light pattern on its monitored area. Thus, Osterweil fails to disclose “a projection device for projecting a light pattern on the target area” as recited in claim 1.

Osterweil also fails to disclose any “measurement means for measuring shifts of the pattern on the captured images” as recited in claim 1. Because Osterweil does not disclose any projection device that projects a light pattern on its monitored area, Osterweil necessarily does not disclose any “measurement means for measuring shifts of the pattern on the captured images.”

Finally, Osterweil does not disclose “wherein sampling-point-moves in the height direction of the object are measured at the plurality of points based on the shifts of the pattern measured.” Osterweil discloses a system that monitors a monitored area in two dimensions. That is, Osterweil merely monitors whether an object enters or leaves a monitored area. Osterweil does not determine whether a sampling point moves in the height direction of the object, much less based on the shifts of the pattern measured, where that pattern is a projected light pattern.

Brodsky fails to cure the deficiencies of Osterweil. Like Osterweil, Brodsky fails to disclose “a projection device for projecting a light pattern on the target area.” Moreover, because Brodsky fails to disclose the projected light pattern, Brodsky necessarily fails to disclose either “measurement means for measuring shifts of the pattern on the captured image” or “wherein sampling-point-moves in the height direction of the object are measured at the plurality of points based on the shifts of the pattern measured” as recited in claim 1. Therefore, even if Osterweil were combined with Brodsky, the combination fails to suggest all the features of claim 1.

The dependent claims all depend from independent claim 1, either directly or indirectly, and are patentable for at least the same reasons, as well as for other patentable features recited therein.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are

needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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